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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,520	10/26/2005	Fabrizio Donazzi	05788.0345-00000	5774

22852 7590 06/19/2006

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER  
LLP  
901 NEW YORK AVENUE, NW  
WASHINGTON, DC 20001-4413

EXAMINER
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MAYO III, WILLIAM H

ART UNIT	PAPER NUMBER
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2831

DATE MAILED: 06/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/530,520

Applicant(s)

DONAZZI ET AL.

Examiner

William H. Mayo III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 28-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 28-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 October 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) .
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) .  
Paper No(s)/Mail Date 4/7/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in National PCT Application No. PCT/EP02/11302, filed on October 9, 2002.

### ***Information Disclosure Statement***

2. The information disclosure statement filed April 7, 2005 has been submitted for consideration by the Office. It has been placed in the application file and the information referred to therein has been considered.

### ***Drawings***

3. The drawings are objected to because Figure 2a lacks the proper cross-hatching which indicates the type of materials, which may be in an invention. Specifically, the cross hatching to indicate the conductive and insulative materials is improper. The applicant should refer to MPEP Section 608.02 for the proper cross-hatching of materials. Correction is required.

In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Sheets" and must be presented in the

amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d)(1). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

### ***Specification***

4. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

5. The abstract of the disclosure is objected to because in lines 6-7, the abstract refers purported merits or speculative applications of the invention, which is improper content for the abstract. The applicant should delete the lines to provide the abstract with proper content. Correction is required. See MPEP § 608.01(b).

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 28-29, 35-37, 39, and 41-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Siewerth (DE Pat Num 27 10620). Siewerth discloses an electrical power transmission line (Figs 1-9) comprising a protective cover for producing a protection systems against strong magnetic fields, wherein the power transmission lines are laid underground (Page 3). Specifically, with respect to claim 28, Siewerth discloses an electrical power transmission line (Fig 1) comprising at least one electrical cable (not shown), a conduit (1) of ferromagnetic material enclosing said at least one cable (not shown) and comprising a base (at 2) and a cover (at 4) and electrical contact elements (5) electrically connecting said base (at 2) and said cover (at 4), wherein said electrical contact elements (5) are selected from the group of metal fusion joints and resilient members suitable to penetrate said ferromagnetic material (Page 6). With respect to claim 29, Siewerth discloses that the base (at 2) and said cover (at 4) have superimposed portions on both sides of said conduit (Fig 1), and wherein said electrical contact elements (5) are applied to said superimposed portions (Page 6). With respect to claim 35, Siewerth discloses that the conduit (1) comprises a plurality of longitudinal sections (5) partially superimposed on each other and each comprising a base portion (at 2) and a cover portion (at 4, Page 6). With respect to claim 36, Siewerth discloses

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that longitudinal sections (5) are electrically coupled to each other (at 7, Page 7). With respect to claim 37, Siewerth discloses that the cover portion (at 4) and the base portion (at 7) each have longitudinal sections (5) which are longitudinally shifted from each other (Fig 1). With respect to claim 39, Siewerth discloses that the ferromagnetic material may be steel (Page 6). With respect to claim 41, Siewerth discloses that at least two of said longitudinal sections (5) extend along different directions (Fig 1), wherein said conduit (1) comprises a joining member (7) for joining said two conduit sections (5), and wherein said joining member (7) consists of two parts electrically connected by means of said electrical contact elements (Pages 6-7). With respect to claim 42, Siewerth discloses that said base portion (at 2) has a "U-shaped cross-section (Fig 1). With respect to claim 43, Siewerth discloses that the cover portion (at 4) is substantially flat (Fig 1). With respect to claim 44, Siewerth discloses that the conduit (1) is placed underground (Fig 5). With respect to claim 45, Siewerth discloses that the material having a magnetic permeability greater than air is positioned between said superimposed portions of said base (at 2) and said cover (at 4).

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 31, 32-34, 38, 40, 46-51, and 53-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siewerth (DE Pat Num 27 10620). Siewerth discloses an electrical power transmission line (Figs 1-9) comprising a protective cover for producing a protection systems against strong magnetic fields, wherein the power transmission lines are laid underground (Page 3). With respect to claim 46, Siewerth discloses a method of screening an electrical power transmission line (Figs 1-9) comprising a protective cover for producing a protection systems against strong magnetic fields, wherein the power transmission lines are laid underground (Page 3), wherein the

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transmission line (Fig 1) comprises at least one electrical cable (not shown) being placed in a conduit (1) of ferromagnetic material enclosing said at least one cable (not shown) and comprising a base (at 2) and a cover (at 4) and providing electrical contact elements (5) electrically connecting said base (at 2) and said cover (at 4), wherein said electrical contact elements (5) are selected from the group of metal fusion joints and resilient members suitable to penetrate said ferromagnetic material (Page 6). With respect to claim 49, Siewerth discloses that the base (at 2) and said cover (at 4) have superimposed portions on both sides of said conduit (Fig 1), and wherein said electrical contact elements (5) are applied to said superimposed portions (Page 6). With respect to claim 50, Siewerth discloses that the conduit (1) comprises a plurality of longitudinal sections (5) partially superimposed on each other and each comprising a base portion (at 2) and a cover portion (at 4, Page 6), through metal fusion (Page 6). With respect to claim 51, Siewerth discloses that longitudinal sections (5) are electrically coupled to each other (at 7, Page 7) through metal fusion (Page 6). With respect to claim 53, Siewerth discloses a method wherein the conduit (1) is placed underground (Fig 5), wherein the cover (at 4) is leaned over the base (at 2) to close the conduit (1). With respect to claim 54, Siewerth discloses that the cover portion (at 4) and the base portion (at 7) each have longitudinal sections (5) which are longitudinally shifted from each other (Fig 1). With respect to claim 53, Siewerth discloses a method wherein the conduit (1) is placed underground (Fig 5), wherein the cover (at 4) is leaned over the base (at 2) to close the conduit (1).



However Siewerth doesn't specifically disclose the superimposed portion having a width that is at least five times greater than the thickness of the air gap (claim 31), nor the air gap being 3% of the perimeter (claim 32), nor the contact elements having a reciprocal longitudinal distance of at most 50 cm (claim 34), nor the longitudinal section being superimposed at a length of at least 25% (claim 38), nor the electrical connection having a conductance of 150S/m (claim 46), nor the electrical connection having a conductance of 500S/m (claim 47), nor the electrical connection having a conductance of 1500S/m (claim 48).

With respect to claims 31-32, 34, 38, 38, and 46-47, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the protective device of Siewerth to comprise the superimposed portion having a width that is at least five times greater than the thickness of the air gap, the air gap being 3% of the perimeter, the contact elements having a reciprocal longitudinal distance of at most 50 cm, the longitudinal section being superimposed at a length of at least 25%, and the electrical connection having a conductance of at least 150S/m, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

12. Claims 30 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siewerth (DE Pat Num 27 10620) in view of Fasterding et al (DE Pat Num 3447836A1, herein referred to as Fasterding). Siewerth discloses an electrical power transmission line (Figs 1-9) comprising a protective cover for producing a protection

systems against strong magnetic fields, wherein the power transmission lines are laid underground (Page 3) as disclosed above with respect to claims 28 & 46.

However, Siewerth doesn't specifically disclose the contact elements being metallic clips made of ferromagnetic material (claims 30 & 52).

Fasterding discloses a protective conduit (Figs 1-6) that is of lower weight, easily installed, and prevents damage to interior components, such as a cable, from weather influences (abstract). Specifically, with respect to claims 30 & 52, Fasterding discloses a protective system (Fig 2) comprising at least one electrical conductor (13) being inserted in a conduit (1) comprising a base element (at 1) and a cover (5), wherein the base (1) and cover (5) are joined by contact elements (6) made of ferromagnetic material (i.e. steel, abstract).

With respect to claims 30 & 52, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the protective conduit of Siewerth to comprise the contact elements configuration as taught by Fasterding because Fasterding teaches that such a configuration provides a protective conduit (Figs 1-6) that is of lower weight, easily installed, and prevents damage to interior components, such as a cable, from weather influences (abstract).

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. They are Dableh et al (Pat Num 4,639,544), Bahber (Pat Num 3,594,492), Donazzi et al (Pat Num 6,806,418), Lapsley (Pat Nums 2,787,651 &

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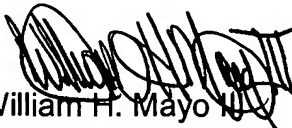
3,160,702), Ziemek et al (Pat Num 5,389,736), all of which disclose various cable conduits.

***Communication***

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Mayo III whose telephone number is (571)-272-1978. The examiner can normally be reached on M-F 8:30am-6:00 pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
William H. Mayo III  
Primary Examiner  
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WHM III

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June 10, 2006